

**REMARKS****Amendment to the Specification**

Paragraph 00023 is amended to recite conical ramp 20 extends smoothly and continuously out of the first annular groove 16 toward the second annular groove 18 for facilitating movement of the retainer ring 22 out of the first annular groove 16 and along the drive shaft 12 to the second annular groove 18.

No new matter has been introduced. The smooth and continuous extension of conical ramp 20 out of the first annual groove 16 toward the second annual groove 18 is clearly shown in Figs. 2-5 of the application as originally filed.

**Amendment to Claim**

Claim 1 is amended to recite a conical ramp extending smoothly and continuously out of the first annular groove toward the second annular groove. The disclosure for the amended language can be found in Figs. 2-5.

**Claim Rejection under 35 USC § 103**

Claims 1-7 have been rejected under 35 USC 103(a) as being unpatentable over *Skinner* 4,428,718 in view of *Ota* 6,629,823.

Shown in Fig. 1 of *Skinner* is a variable displacement compressor having a drive shaft 26 extending along a longitudinal axis. The drive shaft 26 includes a first end (end on right-hand side of Fig. 1), a second end (end on left-hand side of Fig. 1), and is adapted to operatively connected to a swash plate assembly 107. Located between the second end and the swash plate

assembly is a first annular groove, and located between the first annular groove and swash plate assembly is a second annular groove. The first annular groove includes two sides that are substantially perpendicular to the longitudinal axis of the shaft. The side of the first annular groove (right-hand side) shown closest to the second annular groove is abruptly truncated and tapered outwardly toward the second annular groove. Abutted against the right-hand side of the first annular groove, just prior to the beginning of the tapered section, is a thrust washer 32. The thrust washer 32 axially retains the drive shaft 26 inward of the radial bearing 30 (column 2, lines 33-39) by pressing against the right-hand side of the first annular groove and cylinder block 20 (as shown in Fig. 1).

In *Skinner*, the thrust washer 32 may ride upon the tapered section, but will not move out of the groove onto the drive shaft 26 since the inner diameter of the thrust washer is substantially smaller than the outer diameter of the drive shaft. If the thrust washer 32 was capable of movement out of the groove and onto the drive shaft 26, those skilled in the art would recognize that the thrust washer 32 will no longer serve the purpose of axially retaining the drive shaft 26 inward of the radial bearing 30 as taught by *Skinner*. In contrast, Applicants' invention provides for a conical ramp extending smoothly and continuously out of the first annular groove toward the second annular groove *for facilitating movement of the retainer ring out of the first groove along the shaft to the second groove*. The purpose of the retainer ring of Applicants' invention is not for retaining the position of the drive shaft, but for the purpose of allowing the drive shaft to be used with either a pneumatic or an electronic compressor depending on whether the retainer ring is located within the first or second annual groove.

Claim 1 recites a conical ramp extending smoothly and continuously out of said first annular groove toward said second annular groove for facilitating movement of said retainer ring

out of said first groove and along said shaft to said second groove. *Skinner* does not disclose a smooth and continuous conical ramp. *Skinner* teaches away from Applicants' invention, by teaching an abruptly truncated perpendicular section and a transition tapered section adapted to maintain the position of the thrust washer 32 between the right-hand side of the first annular groove and cylinder block 20. *Ota* does not overcome the short-comings of *Skinner*. Claim 1 is patentably distinguishable over *Skinner*. Claims 3-7 ultimately depend upon claim 1. It is respectfully requested that the rejection for claims 1 and 3-7 be withdrawn, and that the claims be allowed.

### Conclusion

Applicants respectfully submit that claims 1 and 3-7 are now currently pending and are in condition for allowance. If it would further prosecution of the application, the Examiner is urged to contact the undersigned at the phone number provided.

The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 50-0831.

Respectfully submitted,



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